

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing Of Claims:

Claim 1 (currently amended). A bearing and shaft assembly for mounting in an opening through a support member for supporting an end of a rotatable member for rotation relative thereto under an axial preload condition, comprising:

a bolt having a threaded end portion threadedly receivable and engageable in a threaded hole in the end of the rotatable member, an opposite end portion positionable in the opening through the support member including an enlarged head having a shoulder therearound facing the threaded end portion, and a cylindrical shaft portion extending between the threaded and opposite end portions; and

a bearing having relatively rotatable inner and outer rings, the inner ring having oppositely facing axial ends extending around a central hole therethrough adapted for receiving the shaft portion of the bolt, and the outer ring including at least one mounting element extending outwardly therefrom and adapted for fixedly mounting the bearing outer ring on a side of the support member opposite the rotatable member such that the inner ring will be positioned and supported by the outer ring in the opening through the support member for rotation relative to the outer ring and the support member;

wherein the threaded end portion and cylindrical shaft portion of the bolt ~~is~~ are insertable through the inner ring of the bearing and the threaded end portion threadedly engageable with the threaded hole of the rotatable member for holding the inner ring of the bearing thereagainst for rotation therewith relative to the outer ring and the support member while exerting an axial tensile force on the bolt, and ~~the outer ring is mountable in the opening through the support member, for~~ supporting the end of the rotatable member for rotation on the support member.

Claim 2 (original). The bearing and shaft assembly of claim 1, further comprising an annular spacer positionable around a portion of the shaft portion of the bolt between the inner ring of the bearing and the head of the bolt for adjusting a length of threaded engagement of the bolt with the rotatable member.

Claim 3 (original). The bearing and shaft assembly of claim 1, wherein the rotatable member is at least partially contained in an interior of an enclosure adjacent to the support member, the opening through the support member extending from an exterior of the enclosure to the interior, and wherein the bolt is insertable through the opening through the support member from the exterior to the interior and threadedly engageable with the threaded hole of the rotatable member, and the at least one mounting element of the outer ring of the bearing is engageable with elements on the exterior of the support member, such that the bearing assembly is installable and removable from the exterior of the enclosure.

Claim 4 (currently amended). The bearing and shaft assembly of claim 3, wherein the enclosure comprises a feeder housing of an agricultural combine, and the rotatable member comprises a rock trap beater or conveyor sprocket shaft, the at least one mounting element comprising a flange adapted to be mounted by fasteners to a side of the feeder housing.

Claim 5 (currently amended). The bearing and shaft assembly of claim 4, wherein the support member comprises a side sheet of the feeder housing and the end of the rock trap beater or conveyor sprocket shaft is located closely adjacent to an interior surface of the side sheet, the inner ring extending axially beyond the flange so as to extend into an interior of the feeder housing when mounted thereon.

Claim 6 (currently amended). A bearing assembly ~~for supporting an end of a rotatable~~ comprising:

a member ~~for rotation~~ rotatable in an interior space of an enclosure in closely spaced proximity to a support member located adjacent to the space, ~~for supporting the bearing assembly and the end of the rotatable member, the bearing assembly comprising:~~

an elongate bolt including a cylindrical portion extending longitudinally from a larger head to a threaded end; and

a bearing including an inner ring and an outer ring supported around the inner ring for relative rotation therebetween, the inner ring including a center hole therethrough ~~adapted for~~ receiving the cylindrical portion of the bolt, and the outer ring including at

least one mounting element fixedly ~~attachable~~ mounted to a portion of the support member external to the interior space ~~for~~ mounting the outer ring in or over an opening through the support member for preventing rotation of the outer ring while allowing rotation of the inner ring relative thereto;

wherein the threaded end of the bolt is ~~insertable from the exterior of the enclosure through the center hole of the inner ring of the bearing and receivable~~ threadedly received in a threaded hole in the end of the rotatable member in the interior space ~~and tightenable in the threaded hole with the outer ring mounted in or over an opening through the support member, for~~ holding the inner ring against the end of the rotatable member for rotation therewith ~~and for~~ while applying a tensile preload force longitudinally through the bolt.

Claim 7 (currently amended). The bearing assembly of claim 6, further comprising an annular spacer ~~positionable~~ positioned around the cylindrical portion of the bolt between the inner ring of the bearing and the head of the bolt for adjusting a longitudinal position of the bolt in the rotatable member.

Claim 8 (previously presented). The bearing assembly of claim 6, wherein the bolt can be unthreaded from the threaded hole in the end of the rotatable member and the outer ring dismounted from the support member to allow externally removing the bearing assembly from the enclosure and the rotatable member.

Claim 9 (original). The bearing assembly of claim 8, wherein the enclosure comprises a feeder housing of an agricultural combine, and the rotatable member comprises a rock trap beater or conveyor sprocket shaft.

Claim 10 (original). The bearing assembly of claim 9, wherein the support member comprises a side sheet of the feeder housing and the end of the rock trap beater or conveyor sprocket shaft is located closely adjacent to an interior surface of the side sheet.

Claim 11 (currently amended). An externally installable and removable preloaded bearing and shaft assembly ~~for~~ supporting an end of a rotatable member of a

feeder assembly of an agricultural combine, for rotation in an interior space in close proximity to a side of an enclosure of the feeder assembly, the bearing and shaft assembly comprising:

an elongate bolt including a cylindrical shaft portion extending longitudinally from a larger head to a threaded end; and

a bearing including an inner ring and an outer ring supported around the inner ring for relative rotation therebetween, the inner ring including a center hole therethrough ~~adapted for~~ receiving the shaft portion of the bolt, and the outer ring including at least one mounting element fixedly ~~attachable~~ mounting the outer ring to the side of the enclosure external to the interior space ~~for mounting the outer ring in or over an opening through the side of the enclosure, the at least one mounting element including a flange on the outer ring attached to the side of the enclosure by at least one externally located fastener;~~

wherein the threaded end of the bolt is ~~insertable from the exterior of the enclosure through the center hole of the inner ring of the bearing and receivable~~ threadedly received in a threaded hole in the end of the rotatable member in the interior space ~~and tightenable in the threaded hole with the outer ring mounted in or over an opening through the side of the enclosure, for holding the inner ring against the end of the rotatable member for rotation therewith and for~~ relative to the outer ring and the enclosure while applying a tensile preloading force longitudinally through the bolt.

Claim 12 (currently amended). The bearing and shaft assembly of claim 11, further comprising an annular spacer ~~positionable~~ positioned around the shaft portion of the bolt between the inner ring of the bearing and the head of the bolt for adjusting a longitudinal relationship of the bolt and the rotatable member.

Claim 13 (previously presented). The bearing and shaft assembly of claim 11, wherein the bolt can be unthreaded from the threaded hole in the end of the rotatable member and the outer ring dismounted from the side of the enclosure for externally removing the bearing assembly from the enclosure and the rotatable member.

Claim 14 (original). The bearing and shaft assembly of claim 11, wherein the enclosure comprises a feeder housing of the feeder assembly, and the rotatable member comprises a rock trap beater or conveyor sprocket shaft.

Claim 15 (original). The bearing and shaft assembly of claim 14, wherein the side of the enclosure comprises a side sheet of the feeder housing and the end of the rock trap beater or conveyor sprocket shaft is located closely adjacent to an interior surface of the side sheet.

Claim 16 (currently amended). The bearing and shaft assembly of claim 15, further comprising an annular spacer ~~positionable~~ positioned around the shaft portion of the bolt between the inner ring of the bearing and the head of the bolt for adjusting a longitudinal position of the bolt head relative to the rock trap beater or conveyor sprocket shaft.

Claim 17 (new). A bearing and shaft assembly for mounting in an opening through a support member for supporting an end of a rotatable member for rotation relative thereto under an axial preload condition, comprising:

a bolt having a threaded end portion threadedly receivable and engageable in a threaded hole in the end of the rotatable member, an opposite end portion positionable in the opening through the support member including an enlarged head having a shoulder therearound facing the threaded end portion, and a cylindrical shaft portion extending between the threaded and opposite end portions; and

a bearing having relatively rotatable inner and outer rings, the inner ring having oppositely facing axial ends extending around a central hole therethrough adapted for receiving the shaft portion of the bolt, and the outer ring including at least one mounting element for mounting the bearing on a side of the support member opposite the rotatable member in the opening through the support member such that the inner ring is rotatable relative to the outer ring and the support member;

wherein the bolt is insertable through the inner ring of the bearing and threadedly engageable with the threaded hole of the rotatable member for holding the inner ring of the bearing thereagainst for rotation therewith relative to the outer ring and the support member while exerting an axial tensile force on the bolt, and the outer ring is mountable

in the opening through the support member, for supporting the end of the rotatable member for rotation on the support member.

Claim 18 (new). The bearing and shaft assembly of claim 17, wherein the at least one mounting element for mounting the bearing comprises a flange extending around the outer ring and including an array of holes therethrough at spaced locations therearound and adapted for receiving threaded fasteners therethrough for mounting the outer ring in the opening.